

IV.—*A List of the Birds of Lucknow.* By WILLIAM JESSE, M.A., F.Z.S., M.B.O.U. (Member of the Bombay Natural History Society).—Part III.

[Continued from 'The Ibis,' 1902, p. 566.]

No. 972. LIOPICUS MAHRATTENSIS. *Yellow-fronted Pied Woodpecker.*

Kutpurwa* [H.]. Small-caste Woodpecker [Martinière boys].

A fairly common and permanent resident, frequenting the better-wooded parts of the district. Reid wrote:—"It generally moves about in pairs, and breeds from February to April in holes, artificially made, in decayed trees. I have frequently found its nest, but could never get at the eggs." The only specimen that I possess was one of a clutch of three taken by L. Jackson and two companions from a hole in the rotten branch of a babool-tree. I was shown the nest about an hour after the eggs had been taken. It was a small tunnel in a horizontal branch, with a neat circular opening on the lower side. The egg is glossy white, and measures '85" × '67".

No. 976. IYNGIPICUS HARDWICKII. *Indian Pigmy Woodpecker.*

A fairly common and permanent resident. Reid wrote:—"I have met with it singly, in pairs, and often in small parties, generally in mango-groves. It keeps well to the tops of trees, where it may be seen flying from branch to branch, and even hopping about like a Sparrow from bough to bough.

"I found a nest of this species with two fresh eggs on the 24th of March. The nest was placed about eight feet from the ground, in a horizontal and internally decayed (but not hollow) bough of a mango-tree in a neglected garden in the native city of Lucknow. The aperture, on the under side of the bough, was about seven-eighths of an inch in diameter, and gradually widened out to the egg-cavity about ten inches away towards the trunk of the tree. The eggs

* Applied to all Woodpeckers and Barbets.

were white and measured respectively $\cdot 70'' \times \cdot 53''$ and $\cdot 70'' \times \cdot 52''$.

No. 986. BRACHYPTERNUS AURANTIUS. *Golden-backed Woodpecker.*

Golden Woodpecker [Martinière boys].

A common and permanent resident, frequenting gardens, avenues, and topes. Its shrill scream is a familiar sound and is uttered as it flies. The bird is said to breed twice a year—once in March and April, and again in the rains. I have no proof of the second nesting-season. I have only found the nest on two or three occasions—March 23rd and April 1st, with eggs; and late in May, with young. The college boys apparently never get the eggs in the “rains.” The nest-hole may be excavated by the bird or may be a natural hollow. On one occasion the eggs were laid in a hollow of a decayed branch exposed to the sky, nevertheless the bird had cut a hole on the under side, though it was quite unnecessary.

The eggs are, of course, pure glossy white, and are usually three in number.

Average of 4 Lucknow eggs	$\cdot 99'' \times \cdot 77''$
Measurement of largest egg	$1\cdot 05'' \times \cdot 80''$
„ smallest egg	$\cdot 97'' \times \cdot 75''$

No. 1003. IYNX TORQUILLA. *Common Wryneck.*

Reid stated that this bird was fairly common during the cold weather. I have only seen it on two or three occasions, once in a mango-grove and again in some babool-trees near the river. Possibly it may be sometimes overlooked.

No. 1008. THEREOCERYX ZEYLONICUS. *Common Indian Green Barbet.*

Large-caste Woodpecker [Martinière boys].

This bird is a permanent and common resident, particularly where banian and pipal trees abound. It is rather a silent bird during the cold weather, but on the approach of spring recovers its voice and makes excellent use of it—the notes being perhaps expressed by the syllables “kotùr, kotùr, kotùr, koturúk, koturúk, koturúk”—until the iron enters into your soul and you dream of murder.

It breeds from March to May, making a hole in a decayed tree, and usually laying four white eggs, which are glossless and rather thin in the shell. The tree selected may be a pipal, mango, babool, sheshum, or any that is sufficiently decayed.

Average of 14 Lucknow eggs	1·18" × ·88"
Measurement of largest egg	1·21" × ·89"
„ smallest egg	1·12" × ·84"

No. 1019. *XANTHOLEMA HÆMATOCEPHALA*. *Crimson-breasted Barbet or Coppersmith*.

Basunta [H.]. Small-caste Green Woodpecker [Anglo-Indian boys].

The Crimson-breasted Barbet is a very common and permanent resident, inhabiting every grove and garden. Its monotonous "tonk, tonk, tonk," like the stroke of a mallet on a piece of copper, is one of our most familiar sounds. It feeds, like the last species, on fruit and berries, and probably on insects as well. It breeds from the end of February to the beginning of June, but most eggs are to be got in March and early April. It excavates its own nest-hole, like other Barbets and Woodpeckers, in a decayed branch. The eggs are three in number, glossless, white, and fragile.

Average of 15 Lucknow eggs	·92" × ·66"
Measurement of largest egg	·97" × ·70"
„ smallest egg	·75" × ·61"

No. 1022. *CORACIAS INDICUS*. *Indian Roller*.

Nilkant [H.]. Blue Jay [Anglo-Indian boys].

One of our commonest birds and a permanent resident. It frequents by preference gardens, groves, and thickly wooded places, but is common enough in the open fields, and even on the bare maidāns. It is very noisy, particularly during the pairing-season. Its evolutions in the air are familiar to everyone who has been in India, and the screaming that goes on during the performance is anything but soothing. It nests in holes of trees or buildings during March, April, and May, laying four glossy white eggs. I once, however, found five. Sometimes the hole is lined with

grass, feathers, paper, &c., at other times the eggs are laid on the bare wood. There seems to be no rule. This bird is sacred to Shiva, but in Lucknow no special sanctity seems to be attached to it.

Average of 12 Lucknow eggs	.....	1.27" × 1.06"
Measurement of largest egg	.....	1.37" × 1.06"
„	smallest egg	..... 1.22" × 1.05"

No. 1024. *CORACIAS GARRULUS. *European Roller.*

I shot a single specimen (adult ♂) on the 25th of October, 1899. The bird was flying about a snipe-jheel, perching on the dry clods amongst the rushes. The jheel was right out in the centre of an "usár" maidán surrounded by high grass. The bird kept making darts into the air after insects, returning immediately afterwards to its perch. Lt.-Col. Thornhill tells me that he has come across this species in Bareilly, and, shortly before his death, Mr. George Reid wrote that he fancied that he had seen the European Roller on one or two occasions, though he had never obtained a specimen.

No. 1026. MEROPS VIRIDIS. *Common Indian Bee-eater.*

Patana, Harrial [H.]. Mango-bird [Anglo-Indian boys].

These pretty little Bee-eaters are very common and permanent residents, being found almost everywhere, in gardens, fields, nullahs, and even on the open maidáns. They are very fond of perching on the telegraph-wires along the railway, in company with Rollers, King-Crows, Shrikes, and Doves. In the evenings they are very fond of collecting together in some dusty locality and taking a sand-bath. "Their sand-bath over, they usually take wing together, and, after indulging in a few circular and other evolutions, during which they keep up an incessant chattering, they separate into small parties for the night." They breed in holes, which they excavate for themselves, in banks, mud-walls, nullahs, hillocks, and similar places, in March, April, and May, but chiefly in April. The usual clutch consists of 5 or 6 almost spherical alabaster-like eggs. These are laid on

the bare ground, and I have never found lining of any sort.

Average of 29 Lucknow eggs	·77" × ·67"
Measurement of largest egg	·83" × ·70"
„ smallest egg	·70" × ·65"

No. 1027. *MEROPS PHILIPPINUS*. *Blue-tailed Bee-eater*.

Large-caste Mango-bird [Martinière boys].

By no means so common as the last bird, and very locally distributed. It is very fond of water, and colonies occur here and there on the banks of the Goomti. I found this species breeding in a colony (May 12 and 19) in a railway-cutting near Mulhaur station, about four miles from the College. The nests were, of course, holes in the sand, and from four to six feet in depth. The number of eggs (glossy white and not so round as those of *M. viridis*) varied from 4 to 6.

Average of 16 Lucknow eggs	·91" × ·78"
Measurement of largest egg	·96" × ·81"
„ smallest egg	·89" × ·75"

No. 1033. *CERYLE VARIA*. *Indian Pied Kingfisher*.

Kowrilla* [H.].

A very common and permanent resident. This Kingfisher always hovers over the water when looking for fishes, and is said never to plunge from a fixed perch. I once, however, watched it diving into a jheel from an overhanging bank, but this is the only instance which I can recollect of it doing so.

It breeds in holes in the river-banks from January to the end of April, but most eggs are found between February 15th and April 1st. They are 4 to 6 in number, glossy white, and oval; and are laid on the bare sand, which is more or less mixed with tiny fish-bones.

Average of 10 Lucknow eggs	1·17" × ·92"
Measurement of largest egg	1·22" × ·94"
„ smallest egg	1·10" × ·89"

No. 1035. *ALCEDO ISPIDA*. *Common Kingfisher*.

The European Kingfisher is not very common, but a few

* Generally applied to all Kingfishers.

individuals occur on the streams and rivers of the Division. It must breed here, but I have never found the nest. I once saw this bird hovering over the water before diving, after the manner of *Ceryle varia*.

No. 1043. PELARGOPSIS GURIAL. *Brown-headed Stork-billed Kingfisher*.

Badami Kowrilla [H.].

“The Brown-headed Kingfisher is by no means abundant and never, I think, frequents water that is not well shaded by trees. One that I shot, and, with an exception or two, the only one which I have ever seen, was dodging about a tank surrounded on all sides by dense bamboo-jungle. I know nothing regarding the bird’s habits or nidification, and cannot say whether it is a permanent resident or not. It probably is.”—*G. Reid*.

I fancy that it is a mere straggler from the Bengal side. I have never come across it.

No. 1044. HALCYON SMYRNENSIS. *White-breasted Kingfisher*.

Reid remarked that this Kingfisher was fairly abundant, but, though not rare, I consider it to be far from common. It is much less aquatic than the other Kingfishers, and is often to be met with in mango-topes, where it doubtless goes in search of insects. On most of the occasions when I have seen it, my attention has been attracted by hearing its characteristic scream as it was flying from one grove to another. No doubt it breeds in the Division, but I have never found the nest.

“During the rainy season, and as long as there is water in the side cuttings, it may be seen along the railways, sitting occasionally on the telegraph wires or posts, but usually on the babool-trees (planted as a line fence) overlooking the pools. It does not dive for fishes—habitually, at least; and though it may catch them occasionally, it appears to depend more upon grasshoppers, &c. for food.”—*G. Reid*.

No. 1062. *LOPHOCEROS BIROSTRIS*. *Common Grey Hornbill*.

Chakotra [H.].

The Common Grey Hornbill is very rarely seen in Lucknow itself, but is fairly numerous in those parts of the Division where pipal and other fig-trees—upon the fruit of which it feeds—abound. It is generally found in pairs, or, at the most, three or four together. I have never found its nest, though it undoubtedly breeds in those localities where it occurs.

No. 1066. *UPUPA EPOPS*. *European Hoopoe*.

A cold-weather visitor only. This species and the next are commonly found together.

No. 1067. *UPUPA INDICA*. *Indian Hoopoe*.

Hud-hud [H.].

The bird that occurs in Lucknow has almost always more or less white on the crest, and I think that it is probably a cross with *U. epops*. In the case of many skins I have had considerable difficulty in assigning them to either species with certainty. One bird, from under which I took four eggs, had a considerable amount of white on the crest.

The breeding-season extends from the end of February to about the end of April. The eggs are as many as seven, pale glossless blue or unspotted brown. The nest is a shapeless bundle of tow, rags, feathers, and similar materials, and is invariably dirty and odoriferous, particularly after the young are hatched. In one nest I found a dead Hoopoe worked into the structure.

Average of 17 Lucknow eggs	·95" × ·67"
Measurement of largest egg	1·01" × ·68"
„ smallest egg	·83" × ·60"

No. 1073. *CYPSELUS AFFINIS*. *Common Indian Swift*.

Ababil [H.]. House-Martin [Martinière boys].

The Indian Swift is very common all over the Division. It breeds, I think, twice a year—at least I have taken eggs from March to July, and Reid took them in February and August. The nests are saucers, having the edge glued to

the roof of some hall or outhouse. Often inside great gateways and such places numbers will be found cemented together. The materials are feathers, straw, &c., worked into a parchment-like substance by means of saliva. Eggs two, rarely three, pure white and elongated.

Average of 12 Lucknow eggs	·86" × ·56"
Measurement of largest egg	·90" × ·57"
" smallest egg	·84" × ·54"

No. 1075. *TACHORNIS BATASSIENSIS*. *Palm-Swift*.

This Swift is almost entirely confined to localities where the toddy-palm is found. In the leaves of the palm the bird breeds, but I have not as yet taken the eggs.

No. 1091. *CAPRIMULGUS ASIATICUS*. *Common Indian Nightjar*.

I have not often come across this bird. "The Common Indian Nightjar is by no means so abundant here as *C. albonotatus* (*C. macrurus*). Indeed, I have rarely or never seen it, except when the 'shades of evening' have so far advanced as to render shooting it next to impossible. It feeds, I think by preference, on the mud by the water's edge, where I have often, when waiting for Geese, seen it flitting actively about."—*G. Reid*.

No. 1093. *CAPRIMULGUS MACRURUS*. *Horsfield's Nightjar*.

"The Large Indian Nightjar is fairly common and a permanent resident. As many as twenty may at times be flushed in some favourite spot, but, as a rule, it is found singly or in pairs, generally in thick brushwood under the shade of the trees, while it is also very partial to bamboo-brakes and thick dhak-jungle. When flushed it usually flies but a short distance and squats again, either on the ground or on the low and spacious arm of some tree. Occasionally it may be found resting during the day high up in thick bamboos, and in clumps of these it probably breeds, though I have never found its nest. But, in whatever tangled thickets it may rest for the day, it sallies forth at dusk to fields and open glades, where it may be seen flying noiselessly along, or feeding and shuffling about with great

activity on the ground, changing the scene of its operations every minute or so, while at intervals its familiar call—chuk, chuk, chuk,—slowly and monotonously repeated, ‘is a welcome and pleasing addition’ to the ‘voices of the night.’”—*G. Reid*. I have nothing further to add beyond that I have not found the bird nearly so common as *Reid* seems to have done.

No. 1104. *CUCULUS CANORUS*. *Cuckoo*.

I have never met with the European Cuckoo in Lucknow, though the Rev. Harry Menzies, the Civil Chaplain, on one occasion told me that he had heard it at the beginning of the hot weather. The late George Reid came across it on two occasions—once amidst the ruins of the Bailey Guard in the Residency grounds, apparently in the spring, and again on the 29th of May, at a spot two miles to the north of the city.

No. 1105. **CUCULUS SATURATUS*. *Himalayan Cuckoo*.

In the “Birds” of the ‘Fauna of British India’ this species is recorded as having “been shot in the cold season at Lucknow.” Beyond this I can find no other instance of its having occurred here.

[?] No. 1107. **CUCULUS MICROPTERUS*. *Indian Cuckoo*.

In the early spring of 1895 I shot a bird in the Martinière College park, which at the time I identified with the present species. Unfortunately the skin has been lost, and as I was only just commencing the study of Indian birds, and, furthermore, as I have never come across it again, I mark it with a query.

No. 1109. *HIEROCOCYX VARIUS*. *Common Hawk-Cuckoo*.

Popiya [H.]. Brain-fever Bird [Anglo-Indian boys].

I think that the Common Hawk-Cuckoo remains all the year round, but of this I am not quite sure. It commences its delightful (?) call early in January and stops it at the beginning of the cold weather. On March 23, 1896, I found an egg, which I am morally certain belonged to this bird, in the nest of *Argya malcolmi*.

[?] No. 1112. *CACOMANTIS PASSERINUS*. *Indian Plaintive Cuckoo*.

I doubt if this bird occurs in Lucknow. Reid apparently never got it. Mr. Adam, as Reid remarked, appeared to imply that the bird not only occurred, but bred there—*vide* Hume's 'Nests and Eggs,' 1st edition, p. 137; but it seems almost certain that a mistake has been made.

No. 1118. *COCCYSTES JACOBINUS*. *Pied Crested Cuckoo*.

Popiya, Kala Popiya [H.]. Shah-Bulbul [Martinière boys].

Reid seemed to imagine that this bird occurred throughout the year. It may do so, but, if it does, it is strange that so striking an object should have escaped my eye year by year from October to May. I cannot recollect ever seeing it until the beginning of June, or after September, except *once*—in November 1901. It lays its round glossy blue eggs in Babblers' nests, but, though they have been shown to me, I have never taken them myself.

No. 1120. *EUDYNAMIS HONORATA*. *Indian Koel*.

Koel, Koéli [H.]. Quailie [Anglo-Indian boys].

According to Reid the Koel is a permanent resident, but I fancy that it migrates, at any rate to a very great extent, in the cold weather. "It feeds principally on fruit, being very fond of the small berries of the banian and other Fici" (*Reid*).

As the same authority has remarked, more than one male may be seen chasing a female, from which it may be inferred that they do not pair. In some parts of India this bird is called the Brain-fever Bird, a name much more rightly bestowed on *Hierococcyx varius*. The Koel lays its eggs in the nest of *Corvus splendens*, and possibly at times in that of *C. macrorhynchus*. June and July are the months for eggs. I have found 2 Koel's and no Crow's eggs in a nest, 3 Crow's and 2 Koel's, 4 Crow's and 1 Koel's, and so on. Reid records 1 Koel's and no Crow's (3 times), 1 hard-set Crow's and 2 Koel's, 3 hard-set Crow's and 1 Koel's, 1 fresh Crow's and 3 Koel's. Reid argued that this went to prove that the female Koel ejected the Crow's eggs from the nest while depositing her own. I have an open mind on the subject,

but I have never found broken eggs underneath a nest from which Koel's eggs have been taken.

"I may also add that at Chinhut, on the 25th of August, I saw a Crow feeding a young Koel. The youngster, to attract the attention of the Crow, occasionally indulged in a continuous 'cawing,' for all the world like a young Crow. It was fully fledged, and flew from tree to tree after its foster parents. On another and more recent occasion, I saw a batch of three young Koels being led about and fed by a pair of Crows, the young birds making very fair attempts to 'caw.'"—*G. Reid.*

Average of 11 Lucknow eggs	1·18" × 1·89"
Measurement of largest egg	1·28" × 1·94"
" smallest egg	1·14" × 1·86"
	1·11" × 1·89"

No. 1129. TACCOCUA LESCHENAULTI. *Sirkeer Cuckoo.*

Brown-bird [Martinière boys].

The Sirkeer Cuckoo is a permanent resident, and, though not numerically abundant, is fairly common. It is most frequently met with in dhak-jungle in which there is a good deal of grass and undergrowth, through which it runs almost exactly like a huge rat or mungoose. It also occurs in mango-topes, and in these I have taken its nest, as well as in babool-trees. The breeding-season commences in April, or possibly earlier, and lasts until August. Most of my eggs have been taken in July. The nest is a rough cup of sticks lined with green leaves, sometimes large and deep, at other times little better than a platform. The full clutch is three, or sometimes four, white eggs with a chalky covering.

Average of 7 Lucknow eggs	1·43" × 1·09"
Measurement of largest egg	1·48" × 1·10"
" smallest egg	1·37" × 1·03"

No. 1130. CENTROPUS SINENSIS. *Common Coucal.*

Mohok [H.]. Crow-Pheasant or Mohawk [Anglo-Indian boys].

The Crow-Pheasant, with its rich black and chestnut plumage, and its sonorous "hoop, hoop, hoop," is a common and permanent resident. It inhabits groves, dhak-jungle,

bamboo-brakes, and patowal grass, and is usually seen not far from water. It breeds in June, July, and August, or possibly later, making a huge globular nest of sticks, grass, and leaves, with a hole at the side, which is placed in some thick tree or in long patowal grass. The eggs, usually four in number and chalky white (more spherical than those of the Sirkeer Cuckoo), get discoloured as incubation proceeds. Possibly this bird and *T. leschenaulti* have two broods in the year. At any rate, Reid found very young birds of both species as late as November. I think myself, however, that these were the produce of abnormally late nests.

Average of 15 Lucknow eggs	.....	1·38" × 1·14"
Measurement of largest egg	.....	1·41" × 1·17"
" smallest egg	.....	1·37" × 1·12"

No. 1136. *PALÆORNIS INDOBURMANICUS*. *Large Burmese Paroquet*.

Pahari tota [H.].

Reid has noticed this bird as appearing in flocks for a few weeks during August and September. Undoubtedly a large Paroquet does arrive at that time and is caught by the chirri-mars, but, as I am always away during the two months in question, I have never myself obtained it. I have none of Reid's skins with me in England, but I cannot help thinking that they are more likely to belong to *P. nipalensis*.

No. 1138. *PALÆORNIS TORQUATUS*. *Rose-ringed Paroquet*.
Tota [H.]. Parrot [Anglo-Indian boys].

A common and permanent resident, doing considerable damage to wheat and other crops. Large numbers have, however, been captured during the last few years to meet the demand of the millinery market in England, and in some parts of the Division I am told that it has been almost exterminated. March is the chief month for eggs, but the birds begin to lay in February and a few as late as April. I have, curiously, not found many nests, and those that I have met with have always contained young or eggs just hatching. The hole is cut by the bird, and the white eggs, four in number, as a rule, are laid on the bare wood. Reid gives

jamin-trees the preference, but I have found them in neem, sheshum, mango, and pipal.

Average of 11 Lucknow eggs	1·19" × ·91"
Measurement of largest egg	1·24" × ·98"
„ smallest egg	1·14" × ·90"

No. 1139. *PALÆORNIS CYANOCEPHALUS*. *Western Blossom-headed Paroquet*.

Lalsira-Tota [H.].

A permanent resident, but not nearly so numerous as *P. torquatus*. It is more abundant in the "rains," from which I fancy that it must be locally migratory. I have never taken the eggs, but Reid got four fresh specimens in a pipal-tree on the 15th of April which averaged ·98" × ·80". The cry of this bird is less harsh and far more pleasing than that of *P. torquatus*.

No. 1152. *STRIX FLAMMEA*. *Barn-Owl*.

Ulu* [H.].

Fairly common in the old buildings and mosques in and round Lucknow. It breeds, I know, in Dilkusha and in the Kaisor-bagh, but I have never been able to get at the nests.

No. 1153. *STRIX CANDIDA*. *Grass-Owl*.

"On one occasion I flushed a solitary Owl, which I took to be the Grass-Owl, in grass- and scrub-jungle near Rahimabad, but, though I followed it from place to place, the Crows kept bothering it, so that it never rested in one spot long enough to allow me to get a shot. Capt. Irby mentions it under the name of *Glaux javanica*, and I have little doubt that it occurs, though sparingly, in suitable localities—for instance, in the jungles about the Chowka and Gogra, where Mr. Anderson seems to have met with it (see 'Stray Feathers,' vol. iii. p. 338)."—*G. Reid*.

† No. 1157. *ASIO ACCIPITRINUS*. *Short-eared Owl*.

The Short-eared Owl is, of course, only a cold-weather visitor, but is then very common in certain localities. It appears to prefer dhak- and grass-jungle, but I have often flushed it in gram-fields. It is gregarious, often as many

* Commonly applied to all Owls.

as eight or ten being found together. It seems less troubled by light than most Owls, and flies well even in broad daylight.

No. 1161. *SYRNIUM OCELLATUM. Mottled Wood-Owl.*

Khushka (?) [H.].

The Mottled Wood-Owl is not common, but every now and then one comes across it, singly or in pairs. I have only found it in mango-groves. It is a permanent resident, but I have not found the nest.

No. 1164. *KETUPA ZEYLONENSIS. Brown Fish-Owl.*

Ghughu * [H.].

The Brown Fish-Owl is not very common. I once found its nest—an old hole at the top of a pipal-tree, containing one young bird—about New Year's day near a big jheel in the Rae Bareli district. In the nest were the remains of a dead Teal, probably a wounded bird.

No. 1168. *BUBO BENGALENSIS. Rock Horned Owl.*

A fairly common bird in suitable places, particularly ravines and nullahs. It breeds here, and eggs have been brought to me belonging either to this or to the next species, but I have never got the nest myself.

No. 1169. *BUBO COROMANDUS. Dusky Horned Owl.*

A fairly common and permanent resident, frequenting mango-topes and, according to Reid, having a special preference for big tamarind-trees. All these large Owls fly comparatively well during the day, and sometimes two or three may be aroused at the same time, when they never seem to have any difficulty in making their way through the trees. On one occasion Reid found quite a collection of these three species of Owls inhabiting some pipal- and tamarind-trees in a dense bamboo-clump, which had once apparently been a fort, but had since become a jungle. The natives believe that the hooting of this Owl round a dwelling foretells death to one of the inhabitants.

* Applied to all the bigger Owls.

No. 1173. SCOPS GIU. *Scops Owl.*

Not very numerous, but possibly this Owl, which hides a great deal, is often overlooked. I have never found the nest, but I have been told by Martinière boys that its eggs, or more probably those of the next species, are occasionally taken.

No. 1178. SCOPS BAKKAMÆNA. *Collared Scops Owl.*

This pretty little Owl is, I think, a permanent resident, and is perhaps commoner than it seems. It appears very stupid and difficult to flush in the daylight. I once stood and looked right into the face of one of these Owls for some moments. It was perched on a branch of a tree about two feet from my nose, but never flew away, and I left it sitting. I have never found the nest, but the eggs to which I have referred above probably belonged to this species.

The Striated Scops Owl (*Scops brucei*) has been recorded from Sultanpur just beyond our borders. *Vide* vol. iii. (Birds) of the 'Fauna of British India,' p. 294.

No. 1180. ATHENE BRAMA. *Spotted Owlet.*

Khukúsat, Kasuttea (*teste* Reid), Ulu [H.].

This little Owl is very common and a perfect nuisance on a moonlight night in the breeding-season. It keeps up a succession of street-fights, and the squabblings and screechings are worse than those of a whole parish of cats collected in one back area. It breeds in holes of trees—mangos, perhaps, for preference—in March and April, laying four round white eggs. Sometimes the hole is unlined, but usually I think there is more or less of a lining of grass, feathers, or leaves.

Average of 19 Lucknow eggs	.....	1·25" × 1·04"
Measurement of largest egg	..... }	1·34" × 1·12"
		1·50" × 1·02"
„ smallest egg	.....	1·14" × 1·00"

No. 1184. GLAUCIDIUM RADIATUM. *Jungle Owlet.*

Kalakasut [H., *teste* Reid].

According to Reid this is a very common bird, but I have hardly ever met with it. As it is a terrible skulker, it is

probably constantly overlooked; but, even then, it is strange that out of the numbers of holes in which I have searched for, and found, nests of *A. brama*, I have never come across that of *G. radiatum*. Yet Reid seems to have found a pair, or more, in almost every mango-grove.

No. 1187. *NINOX SCUTULATA*. *Brown Hawk-Owl*.

This is another Owl which is "common and a permanent resident," according to Reid, but which I have only come across once or twice at most. It is, however, quite nocturnal in its habits, and probably requires to be specially looked for. One that Reid shot cried like a hare. I have never found its nest, nor do I know anything of its breeding with us.

No. 1189. *PANDION HALIAËTUS*. *Osprey*.

Machariya; Machi-mar [H.].

The Osprey, though not numerous, is usually to be seen on every large jheel, and Reid stated that it was common on the big rivers. It departs at the approach of hot weather. On one occasion I owed my evening meal to this bird. A party of us were staying at Milkipur, near Fyzabad, for the usual Christmas "shoot." Two of us, with our host, Mr. A. C. Bryson, of the Opium Department, went away early in the morning to inspect a big jheel some five miles off, but the fourth, Mr. A. E. Pierpoint, remained behind at the camp to write letters. By tiffin time these were finished, and, having nothing to do, he picked up his gun and strolled off to a jheel about half a mile away.

The Duck and Teal kept well out of shot in the centre, and, having no boat, he was unable to get on terms, and so stood watching them. Suddenly an Osprey came sailing over the water, and, making a plunge, rose with a "rohu" some 2 lbs. or more in weight, which it proceeded to carry off to a neighbouring tree. In doing so it passed Pierpoint, who shot it, and bore the fish home in triumph. Needless to say we were totally unable to guess how he had come by his scaly prey, when he asked us the question that night at dinner.

No. 1190. *VULTUR MONACHUS.* *Cinereous Vulture.*

A specimen was shot many years ago at Ajgaen near Unao, and is in the Lucknow Museum. My friend, Major A. Newnham, I.S.C., Cantonment Magistrate, Lucknow, writes to me that, in the spring of this year (1902), he shot one of these birds on the Grass Farm. Beyond these two instances, I can find no record of occurrence here.

No. 1191. *OTOGYPS CALVUS.* *Black Vulture.*

Lat-sir Gidh* [H.]. King or Red-headed Vulture [Europeans and Anglo-Indians].

Widely spread over the Division, but not in great numbers. "Wheresoever the carcass is, thither will the Eagles [Vultures] be gathered together," and amongst the wrangling crew there is sure to be one, if not two, of these fine birds. Often I have been watching the vulgar white-backed herd, with a disreputable following of Kites and Crows, tearing and fighting over a body, when one of these aristocrats, in his red cap, black coat, and white waistcoat, has made his appearance. Way is immediately made for him, the plebeian herd slinking back as if ashamed or afraid, and I can never recollect the last comer ever being obliged to assert his authority.

The breeding-season appears to be in February and March, though it is possibly earlier. I have found nests on several occasions, but, whether it has been merely bad luck or not, those that I have found were either most dangerously placed or empty. To one, at the end of a bare branch of a lofty poplar, my boy-friend Green offered to climb, but I refused to allow him. The next day the egg was abstracted by a daring rival. My shikari Dwarka brought me a very hard-set Vulture's egg from Nilgaum, near Ataria, on Dec. 6, 1900. He declared that he saw the bird on the nest before climbing the tree, and, as I have never caught him deceiving me about an egg, I am disposed to pass the fact, though I must own that the date is exceptionally early for Oudh. This, like all Vultures' eggs, is dirty white, with

* "Gidh" is applied to all Vultures.

a few *very faint* mauve and reddish markings, and measures $3\cdot16'' \times 2\cdot56''$.

No. 1194. GYPS INDICUS. *Indian Long-billed Vulture.*

Reid, in his 'Birds of the Lucknow Civil Division,' has written as follows:—

"I include the Long-billed Brown Vulture with some hesitation, though Capt. Irby, in his paper on the Birds of Oudh and Kumaon, *vide* 'The Ibis,' vol. iii. 1861, p. 217, states that it is just as common as *Pseudogyps bengalensis*; and that one was 'caught inside a horse's belly at Alumbagh.' Now there is no Vulture here as common as *P. bengalensis*; if there is, it is certainly singular that I have not obtained specimens. On the other hand, I have occasionally seen a Vulture that I thought could not be *G. bengalensis*, but whether it was *G. indicus* or *G. fulvescens*—not to mention the probability of *G. pallescens* or *G. tenuirostris* occurring—I cannot say, but should think that it was *G. indicus*." To this I have nothing to add, save to say that, like Reid, I have occasionally seen what I believe to have been *G. indicus*, but, like him, I have not yet obtained a specimen.

No. 1196. PSEUDOGYPS BENGALENSIS. *Indian White-backed Vulture.*

Chamar Gidh [H.].

This Vulture is very common and a permanent resident. Though slow in rising from the ground, when once aloft it sails like a majestic man-of-war. High up in the air, this species and *Otogyps calvus* can be readily distinguished, as, even if too far off to make out the white waistcoat, the more pointed pinions of the latter serve to identify it. The power of the Vulture's beak and the rapidity with which it feeds must be seen to be realized. On one occasion my servants knocked over a mad jackal and did not quite kill it. Immediately some Vultures made their appearance, and, despite the fact that the poor brute was still alive, commenced their horrid meal. The cries of the victim dis-

turbed a friend and myself, who were indoors, and, on learning the cause, we got a gun and put an end to its sufferings. We then placed two chairs about fifty yards from the jackal and timed the Vultures. At the end of an hour it was too dark to see any longer, so we went to find out what was left. The total remains were the shank of one fore leg and a bit of skin about as big as the palm of one's hand. Beyond this not a vestige was to be seen, flesh, skin, bones, *everything* had disappeared down the gullets of two voracious Black and three White-backed Vultures, aided by the usual rag-tag and bob-tail of Kites and Crows.

Pseudogyps bengalensis breeds chiefly in November and December, most of the young being hatched by January. Occasionally nests with eggs may be obtained both earlier and later. I took one egg on March 11, 1901. Where there is one nest, there will usually be two or three others at least—large bulky structures of sticks lined with green leaves. I have found them on mango, tamarind, popul, neem, and sheshum trees, often at great heights from the ground. Solitary nests are, I think, more often on mango-trees, though there is no well-defined rule in the matter. Both *O. calvus* and *P. bengalensis* often nest on trees in the centre of villages, and, in my early days in India, I once got seriously assaulted by villagers for trying to examine one of these. In justice to myself, I may say it was not altogether my fault, as I understood that there was no objection, but, while my climbers were up the tree, the onlookers suddenly rushed upon me. Seeing that they tried to pull away my gun (which was loaded) *by the muzzle*, it was providential that there was no accident.

Only one egg, of course, is laid, pure white as a rule when fresh, but sometimes fairly spotted and freckled with red. My second largest egg has quite a respectable crimson cap at the broad end.

Average of 14 Lucknow eggs	.....	3.26" × 2.46"
Measurement of largest egg	.....	3.52" × 2.65"
„	smallest egg (abnormal).	2.54" × 2.00"

No. 1197. NEOPHRON GINGINIANUS. *Small White Scavenger Vulture.*

Saféd Gidh, Kal Murgh [II.]. White Hawk [Martinière boys].

This eminently useful but exceedingly low-caste bird is very common. To Thomas Atkins and his *confrères* it is invariably known as the "Shork," the derivation of which name hardly bears investigation. Its principal food is human excrement, whence it gets the second native appellation. The trenching-grounds, and all conservancy or slaughter-quarters, are frequented by numbers of these birds. By the uninitiated, the brown young and the white adult are looked upon as distinct species. The breeding-season is from March to May or possibly earlier. The nest, an evil-smelling pile of rags, refuse, and filth of every description, is placed either in a tree—mango, for choice—or on some building. I have taken the eggs—two, or sometimes only one in number—between the first two great arms of a mango in cantonments standing close by the carriage-road and not ten feet from the ground; on the top of a native house in the city; from the face of the United Service Club [Chutter Munzil]; and from what appeared to be the deserted nest of *Pseudogyps bengalensis* in a solitary pepul-tree, as well as in many other similar places. On the second occasion the bird refused to budge from her charge and we had to poke her off with a stick. The eggs are white in ground-colour, but, as a rule, so thickly blotched with russet and red that they are like huge Falcon's. The colouring-matter easily washes off, a fact to be remembered when cleaning handsome specimens.

Average of 8 Lucknow eggs	.....	2.50" × 1.94"
Measurement of largest egg	.....	2.80" × 2.20"
„ smallest egg	.....	2.30" × 1.84"

No. 1201. AQUILA HELIACA. *Imperial Eagle.*

Bara Jumiz*. Satangal [H., *teste* Reid]. Báz †.

Not uncommon, especially in dhák-jungle studded here

* "Jumiz" is applied to all large Eagles.

† "Báz" is applied indifferently to Eagles, Kites (except *M. govinda*), Harriers, and Falcons.

and there with solitary peepul or banian trees. A few years ago some Martinière boys brought me the claws of an individual of this species, which they had killed on their cricket-ground. Major Newnham, I.S.C., shot a magnificent specimen of the bird on the Bangla Bazar Tank, and since then has noticed it fairly often. According to Reid, he has found it on "the dry beds of jheels, devouring crabs and on one or two occasions eating carrion."

No. 1202. *AQUILA BIFASCIATA*. *Steppe-Eagle*.

The Bifasciated or Steppe-Eagle is not very common. Reid shot a male on January 1st feeding on the carcase of a sheep, so that it is a carrion-eater like *A. heliaca*, an example of which was also shot when engaged on a similar repast. My experience of Eagles forces me to the conclusion that the *majority* are anything but the "noble" birds described in song and fable. Bonelli's and the Dwarf Eagle are sporting gentlemen, but many of the bigger kinds are little better than Vultures. One of these Eagles was captured alive on a maidán close to the College by a little native boy, who found it disabled.

These two species are apparently cold-weather visitors only.

No. 1203. *AQUILA VINDHIANA*. *Indian Tawny Eagle*.

Wokháb, Ragar, Báaz [H.]. Lugger [Martinière boys].

By far our commonest Eagle, and, of course, a permanent resident. It is to be seen almost anywhere, and a pair reared a young bird at the top of a "cork"-tree, not 200 yards from the United Service Club. I have found the nest on several occasions. It is a large structure of sticks, lined with grass or straw and a few feathers or leaves, and placed at the very top of some high tree. Unlike *Milvus gorinda*, this Eagle rarely chooses a thick fork, but prefers the smaller branches at the summit. It is fond of babool-trees. The eggs are two in number, but usually only one is hatched. Most are to be found in December and January, but they have been brought to me as late as the 15th of May. On two occasions only have I found eggs myself, at other

times I have always found young. Strangely, these two nests each had that of a Chiruka [*Uroloncha malabarica*] built in the underneath part. One contained a grown-up family, the Eagle's nest having an addled egg; the other was occupied by the hen Chiruka, sitting on three eggs, while the Eagle was covering two, not three inches higher. Both these nests were in babool-trees. In colour the eggs are dirty white, rarely much spotted, but usually with a few specks of red and brown. After being blown, when held up against the light they have a greenish tint.

Average of 6 Lucknow eggs	2·53" × 2·02"
Measurement of largest egg	2·60" × 2·07"
" smallest egg	2·41" × 2·00"

No. 1204. *AQUILA FULVESCENS*. *Brooks's Eagle*.

A specimen of this species—if it be a real species—is recorded by Mr. A. O. Hume from Lucknow (*vide* note, initialled A. O. H., in Reid's paper in 'Stray Feathers').

No. 1205. *AQUILA MACULATA*. *Large Spotted Eagle*.

This Eagle appears to be fairly common, but I know little about it. I fancy that it is a permanent resident and breeds here, as I have an egg, taken on June 16, 1901, by H. M. Braybrooke, which I think can only belong to this bird. Unfortunately I was not told of it until too late, and so could not go to get the parent while sitting on the nest. The egg is white, fairly thickly spotted with purplish red, and measures 2·45" × 1·97". When looking through Mr. H. E. Dresser's collection some time ago, I was immediately struck by the resemblance of some of his eggs of the Spotted Eagle (European) to my specimen. It might, *possibly*, belong to the next species, but, as that is far less common, I think that it is unlikely.

No. 1206. **AQUILA HASTATA*. *Small Indian Spotted Eagle*.

I know nothing particular about this Eagle, which appears to be uncommon. Reid does not mention it in his list, having apparently confounded it with *A. maculata*, but in the Museum are two immature skins obtained near Lucknow, one by Reid himself.

No. 1207. *HIERAËTUS FASCIATUS*. *Bonelli's Eagle*.

Churwa (?) [H., *teste* Reid].

The Museum contains several good skins of this fine Eagle, so that it cannot be rare here. Nevertheless, I know nothing of it from personal observation. Mr. Pyne, Opium Department, very kindly sent me a splendid specimen from Rae Baréli, where it had been doing much damage in the pigeon-lofts and poultry-yards and was described as "a perfect Cronje amongst the Hawks."

No. 1208. **HIERAËTUS PENNATUS*. *Booted Eagle*.

I have nothing to add beyond what I have already written and here reproduce:—

"This bird is not included by Reid in his list of the birds of the Lucknow Civil Division, although it is true that he remarks that it is 'almost certain to be found.' In the latest catalogue (1890) of the Lucknow Provincial Museum there are three specimens entered as obtained in Lucknow, viz.: ad. sex?, ad. ♂, juv. ♂. I have come across this handsome little Eagle on two or three occasions in the large park of La Martinière College. The first example was a female, which I shot. I was attracted to it by the cries of a party of *Argya malcolmi*, which were flying all round, evidently in a perfect fever of excitement. This was on Dec. 17, 1897. Several times after this I saw another bird, which I concluded was the mate of the former. My second specimen was also obtained in the Martinière Park, while sitting in a sheshum-tree, in the middle of March 1899. On examining the label I find that I did not determine the sex, but, judging from its small size, I fancy that it was a male. The feet, legs, and cere in this example were lemon-yellow; in the female I noted the bill as yellowish grey at the base and bluish black at the tip. Since that time I have on two or three occasions come across birds which I believe to have been individuals of this Eagle, but was unable to secure them."

No. 1216. *CIRCAËTUS GALLICUS*. *Short-toed Eagle*.

Jallar (?) [H., *teste* Reid].

The Short-toed Eagle is a permanent resident and fairly

common. I have never found the nest, but one from which an egg had been taken in April was shown to me, and I fancy that it may have belonged to this species. It was in a babool-tree.

As Reid has remarked, this species is much more sluggish and easy to approach during the middle of the day.

No. 1217. *SPILORNIS CHEELA*. *Crested Serpent-Eagle*.

Common during the cold weather, after which it leaves for the hills or the sub-montane districts. During the day it conceals itself more or less in some tree, much after the fashion of the Honey-Buzzard, but in the mornings and evenings it is often to be seen sailing high in the air. It seems to prefer the more wooded localities, but I once came across the bird feeding on something—I could not see what—on a bund by the side of a jheel.

No. 1220. *BUTASTUR TEESA*. *White-eyed Buzzard-Eagle*.

Teesa [H.]. Rat-Hawk [? Martinière boys].

A common and permanent resident, yet, curiously enough, I have never found its nest, and have only once had it reported. The eggs, which are skim-milk colour, are common enough, I am told, in the Hardoi and Shajahanpur districts. It is frequently to be seen hawking over “usar” plains, singly or in pairs, or sitting on a bit of dried kunker. Telegraph-posts are also favourite perches.

No. 1223. *HALIAËTUS LEUCORYPHUS*. *Pallas's Fishing-Eagle*.

Chatangal, Macharang, Mardum, Machakool [H.].

This fine Eagle is a common and permanent resident, and almost every jheel of any size is tenanted by one or two pairs. Reid considered it to be anything but a Fishing-Eagle. “It seldom, as a rule, attempts to catch the finny tribe, but acts the part of a pirate in robbing the Osprey, Kites, Marsh-Harriers, &c., of their prey, while sportsmen recognise it as the poacher which never loses an opportunity of carrying off a dead or wounded Duck, often from under their very noses. It will feed on almost anything—birds,

snakes, rats, frogs, crabs, turtles—anything, in fact, but fishes, unless, of course, it can get them without much trouble. I may be hard on this otherwise magnificent Eagle, but, if so, it is because I have had ample opportunities of gauging his capabilities.”

My friend Mr. Edgar Hill, of the Court of Wards, wrote to protest against this slanderous attack on the Chatangal's character, but, nevertheless, I fear that Reid's statement was not far from the truth.

I fancy that the Fishing-Eagle pairs for life. The nest is a huge structure of sticks, placed in some lofty solitary pekul or mango, not far from water. Though I have often seen the fabrics, I have only twice searched them. One was empty, but the three eggs were brought me ten days afterwards, on Nov. 23rd, 1896. The other I took on Nov. 20th, 1898, when it contained four eggs. Reid, who took several nests, never got eggs after November, but my friend Mr. P. S. Lucas found a pair in January. From the end of October to the beginning of December is the most likely period to get them. The size of my second nest can be imagined, when I remark that the native climber sat in the nest—it was built *on* the branch, *not* in a fork—and lowered the contents. I have never known these birds shew any signs of fight when I went near their nests, but the late Captain Hutton told a different story concerning a pair with young.

Average of 5 Lucknow eggs	2.87" × 2.21"
Measurement of largest egg	3.05" × 2.21"
„ smallest egg	2.72" × 2.18"

No. 1226. *POLIOAËTUS ICHTHYAËTUS*. *Large Grey-headed Fishing-Eagle*.

Reid came across this bird on two or three occasions. According to him, it occurs now and then, during the cold weather, on the large jheels, and more frequently on the big rivers. An adult ♂, stuffed by Reid, is in the Museum.

No. 1227. *POLIOAËTUS HUMILIS*. *Hodgson's Fishing-Eagle*.
An exceedingly rare cold-weather visitor. The only

specimen that I have seen is an adult ♀, shot by Reid in the district.

No. 1228. *HALIASTUR INDUS. Brahminy Kite.*

Bahmini chil [H.]. Fish-Hawk [Martinière boys].

This Kite, with its handsome maroon plumage and white head and shoulders, is common during the cold weather, but seems to migrate to a certain extent between April and July, probably to wetter localities. A few remain to breed, but I appear to be almost the only person who has been lucky enough to get authentic eggs in Lucknow. On April 16, 1898, I took one addled egg from a nest in which there was a young bird. The structure was much like that of *Milvus govinda*, a rough mass of sticks lined with mud. It was situated about three-quarters way up a bare mango-tree, in a tope near the Aishbagh station. The parents were greatly perturbed, but I did not touch them. On March 24, 1900, I got two more fresh eggs from the same tope, but the nest was on another tree, and was, if my memory serves me, lined with straw. These eggs are dirty white, one having a very few faint red specks. They measure 1.95'' × 1.57'', 2.00'' × 1.62'', 1.94'' × 1.62'' respectively. According to Reid, this bird is particularly partial to crabs.

No. 1229. *MILVUS GOVINDA. Common Pariah Kite.*

Chil [H.]. Hawk [Martinière boys].

Kites swarm in Lucknow, as they do in all Indian towns. They seem rarely to trouble the poultry-yard, though no doubt they occasionally carry off a chicken. Their principal food is offal of all sorts, and, with the Vultures and Crows, they act as scavengers. They are very bold. On one occasion my khansaman was walking across the compound with a bone on a plate, when down swooped a Kite and seized the bone, which, however, it dropped, knocking off the man's turban. On another occasion a Kite carried off a tame squirrel from the shelter of its master's arms.

The breeding-season lasts from December to May, but most eggs are taken in March and early April. At this season they are especially daring, and readily attack those

who go near their nests. On two or three occasions they have knocked off my climber's cap, and once a pair gave me much trouble, even chasing me after I had descended the tree. Another Kite was reported to have stuck its claws into a boy. Whether correct or not, the fact remained that the Kite hatched her eggs undisturbed.

All the nests that I have seen, and I have seen hundreds, have been placed on trees, in some thick fork and usually not at the very top, by which fact they may easily be distinguished from those of Eagles. They are bulky stick structures, lined with mud and rags, and, in more than one instance, I have found large bits of brick and kunker alongside of the eggs. These are nearly always two in number, though I have taken four. In colour they are white, sometimes but little marked, but usually more or less heavily blotched and splashed with varying shades of red and brown.

Average of 12 † Lucknow eggs.....	2.19" × 1.70"
Measurement of largest egg	2.30" × 1.74"
" smallest egg	1.99" × 1.68"

Reid speaks of this bird breeding indiscriminately on "trees, mosques, minarets, old buildings, &c.," but I have never seen a nest that was not on the first-named.

No. 1230. **MILVUS MELANOTIS*. *Large Indian Kite*.

An occasional winter visitor, but I think very rare. Its larger size and the conspicuous white patch on the inner webs of the quills near the base serve to distinguish it from *M. govinda*. The only specimen that I secured was a female, which I shot as it rose from a low dhák-tree by the Mohan-lalganj jheel, Jan. 18, 1900. There is also a skin in the Museum from Hardoi.

No. 1232. *ELANUS CÆRULEUS*. *Black-winged Kite*.

Masunwa [H.].

Not numerous, but a permanent resident. I have chiefly seen it in the neighbourhood of those jheels which are more or less surrounded with heavy grass and dhák-jungle. Reid

† Reid's measurements have evidently been misread by the printers.

found it nesting in a mango in November, and I flushed a bird off an empty nest in a palm in early June. All the eggs in my collection are from Guzerat, and I have seen none from this part of India.

No. 1233. *CIRCUS MACRURUS. Pale Harrier.*

A very common winter visitor. It flies low, gliding sometimes slowly, sometimes swiftly, over the fields, and it is astonishing to see how suddenly it stops itself dead with a quick turn, and drops instantly on its prey.

No. 1234. *CIRCUS CINERACEUS. Montagu's Harrier.*

According to Captain Irby, this Harrier is "found in the same localities as the Pale Harrier, and is perhaps more numerous." Reid, however, never got it, and I have only one skin, of an example (♀) which I shot during the cold weather of 1898.

No. 1236. *CIRCUS MELANOLEUCUS. Pied Harrier.*

The same authority (Captain Irby) gives this species as being "very abundant near the rivers Chowka and Gogra, on the plains covered with thick grass about two feet high. I have never seen it far away from grass-jungle, where it appears to replace the preceding species and the Pale Harrier, although they are now and then seen there also."

If Captain Irby's account is correct, it is strange that neither Reid nor I have ever met with it.

No. 1237. *CIRCUS ÆRUGINOSUS. Marsh-Harrier.*

Kutar [H.].

The Marsh-Harrier is very abundant during the cold weather, and I have once or twice seen it during the hot season and "rains." For this reason I am inclined to believe, with Reid, that a few pairs breed in the moister parts of Oudh. The chirri-mars declare they do, making their nests on the ground in some marshy spot. Their chief food consists of frogs, snakes, and other reptiles, but rats, mice, and birds are equally prized. Out shooting they are a perfect nuisance to the sportsman. They will beat up and down over the "snipey" bits, putting up bird after bird for no reason, as

they never stoop at them. Teal and Duck of all sorts they harry, and Coots they drive into a perfect frenzy, though I have never seen them strike home. Possibly this is because, if a bird be killed or wounded, one of these Harriers immediately bears it off to some elevated ridge or bank, and devours it before the eyes of its disconsolate brethren.

No. 1239. *BUTEO FEROX. *Long-legged Buzzard.*

A winter visitor to Lucknow, and, I think, rare. In the Museum are four examples shot by myself, the Collector, and Reid, though the last-named did not include the species in his "List." I have also seen one or two specimens which I could not procure. All that I have observed were on more or less cultivated maidáns interspersed with babool-jungle.

No. 1241. BUTEO DESERTORUM. *Common Buzzard.*

A winter visitor and by no means common. Appears chiefly to affect ravines and dhák-jungle.

No. 1244. ASTUR BADIUS. *Shikra.*

Shikra [H.]. Sparrow-Hawk [Martinière boys].

This is our commonest Hawk, and is to be found in almost every part of the district. It is by no means a shy bird, and, like the Tawny Eagle, builds its nest in the Station close to human dwellings. I have found several, but, until last season, I had bad luck as regards eggs. Both this bird and *Aquila vindhiana* seem to desert them on the slightest pretext. The nest is a rough structure of sticks high up in some tree—the mango in nine cases out of ten—and the eggs, skim-milk † in colour and usually three in number, are laid from the end of March to the middle of May.

Average of 23 Lucknow eggs	.....	1.53" × 1.22"
Measurement of largest egg	.....	1.62" × 1.25"
„ smallest egg	.....	1.42" × 1.18"

The Shikra is much prized by those natives who still indulge in falconry. The Hawk is thrown from the hand at Mynas, Quails, Larks, and such small fry. Reid on one

† I took one clutch slightly marked with large faint blotches of brownish yellow.

occasion watched a pair catch and devour a squirrel (*Sciurus palmarum*).

No. 1247. ACCIPITER NISUS. *Sparrow-Hawk*.

Basha [H.].

A fairly common winter visitor. By those who do not know the simple way of distinguishing the two genera—viz., the much greater length and slenderness of the tarsi and toes in *Accipiter*—this and the preceding species are often confounded.

No. 1248. ACCIPITER VIRGATUS. *Besra Sparrow-Hawk*.

Besra [H.].

A cold-weather visitor, very locally distributed. Chiefly met with in dense bamboo-brakes, through which it moves with rapidity and ease. It is far from common, and I know nothing about it, save what Reid has written in his notes.

No. 1249. PERNIS CRISTATUS. *Crested Honey-Buzzard*.

The Honey-Buzzard is not uncommon, but is very fond of concealing itself in thick trees and hence is not very often seen. I came upon one with a huge piece of comb in its beak, and from one which Reid shot there flowed enough honey to fill a tea-cup. Another that I shot in June 1901 got into a dreadful mess from the same cause. A few individuals may remain to breed, but I think that most of them migrate locally to the sub-montane tracts for that purpose. They nest, or at any rate did so years ago, in the avenues and compounds of Saharanpur, which is just south of Dehra Dún.

+ No. 1254. FALCO PEREGRINUS. *Peregrine Falcon*.

Bhyri [H.].

The Peregrine is a cold-weather visitor and is looked upon with great favour by falconers. It is generally to be seen near jheel-sides, and Reid has remarked upon the way in which the bird seems to know the purpose of a gun, sallying forth from its perch after each shot to scan the locality for a dead or wounded bird. Of late years, possibly because much marsh-land has been brought under cultivation, the Peregrine has become rather scarce.

No. 1255. *FALCO PEREGRINATOR.* *Sháhin Falcon.*

Kohi [H.].

Reid got a single specimen (adult ♂) at Unao, and now and then birds may be seen in the possession of falconers, but I doubt whether these are procured anywhere in the vicinity of Lucknow.

No. 1256. *FALCO BARBARUS.* *Barbary Falcon.*

I include this species on the strength of Captain Irby's specimen obtained at Barabanki in 1858.

Major Cock, in the 'Gazetteer of Oudh,' gives it as one of the birds of the Kheri district; so, as Reid remarked, it is probably a more or less frequent visitor to the Terai.

No. 1257. *FALCO JUGGER.* *Lugger Falcon.*

Laggar, Bhyri [H.]. Pigeon-Hawk [Anglo-Indians].

The Lugger is a permanent resident and fairly common. It is found almost anywhere, but principally in the more open country. It preys upon Pigeons in the city, where it often does much mischief. A pair breed every year, and have done—or their ancestors before them—for thirty years at least, on the top of the monument standing in the middle of the Martinière tank. These birds never seem to interfere with the Pigeons which live about the College, but the Estate Superintendent has, on more than one occasion, received letters complaining of them from persons in distant parts of the city. More than one enraged and blood-thirsty pigeon-owner has obtained leave to bring a gun, but the position of the monument, and its great height, put any idea of slaughter out of the question. Though nests have been shown me on high trees, during the month of March, I have never yet got the eggs. Reid, who found three half-fledged young birds in that month, states that the Lugger begins to lay as early as December. Though capable of great speed, I fancy that it is less dashing and pertinacious than the Peregrine, and is inclined to get sulky if it misses its quarry. At any rate, though sought after by sporting Nawabs, falconers do not prize it nearly as much as they do the "pukka" Bhyri.

No. 1260. *FALCO SUBBUTEO. Hobby.*

Morassani [H., *teste* Reid].

A somewhat rare cold-weather visitor, coming about November and leaving in March. It is generally found in pairs or small parties in the better-wooded and more marshy parts. An almost illegible pencil note which I have just come across gives "Pyehan" as another name for this bird.

No. 1261. *FALCO SEVERUS. Indian Hobby.*

Neither Reid nor I have ever met with this bird in the wild state, but, as recently caught specimens are sometimes to be seen in the bazaars, it must occur here occasionally.

No. 1264. *ÆSALON CHICQUERA. Red-headed Merlin.*

Turmooti, Turumti [H.].

In Oudh this bird is invariably known as the Turmooti, and, though occasionally one hears it called Turumti, it is generally by the European who is making enquiries regarding it. Elsewhere, no doubt, the second spelling may be correct, but not with us.

This game little Falcon is fairly common and a permanent resident, making a stick nest in some high tree about February or March. I have seen only one or two of these nests, and, unfortunately, have not got the eggs. In one case, after the bird had laid two, a youngster broke out of bounds and forestalled me. Some years ago five red eggs, handsomely blotched with deep red-brown, were taken from a nest at the top of a "cork"-tree near the Kurshaed Munzil. Reid took three fledged young from a nest at the top of a mango on the 21st of April. The Turmooti preys largely on the numerous Larks that swarm on the maidáns, and often I have witnessed some of the prettiest hawking imaginable.

—No. 1265. *TINNUNCULUS ALAUDARIUS. Kestrel.*

Koruttia, Kursuttia [H.].

Very common during the cold weather. It departs to the hills to breed, and the only egg that I have was kindly taken for me by Mr. P. S. Lucas from a nest which he showed me on a cliff near Solon below Simla. I know a nest of the

Lammergeier [*Gypæëtus barbatus*] on a cliff just below the Simla cart-road which is appropriated during the summer by a pair of Kestrels. Reid found the bird breeding in company between Almora and Naini Tal in May. Its food consists of insects, frogs, and small mammals, while once the above-named authority found it feasting on a Dove (*Turtur suratensis*).

No. 1265. TINNUNCULUS CENCHIRIS. *Lesser Kestrel.*

Apparently a rare winter visitor. Possibly it has been overlooked. Its smaller size and whitish or pale horny claws—instead of black, as in *T. alaudarius*—distinguish it at once. Two local skins—of which I can find only one—are in the Museum, and two more specimens are said to have been obtained here by the late Mr. Anderson.

[To be continued.]

V.—Remarks on the Flight of Albatrosses.

By Captain F. W. HUTTON, F.R.S.

SAILORS apply the name "Albatross" to the large species with white backs, and distinguish the smaller forms of the Southern Ocean—with black backs and a dark border to the anterior edge of the lower surface of the wing—as "Mollymawks." The breeding-habits in these two groups are very different; the Albatrosses choosing grassy flats, the Mollymawks rocky cliffs, on which to make their nests. The British Museum Catalogue, however, takes the shape of the bill as a character by which to separate the birds; thus placing *Diomedea melanophrys*, which is the typical Mollymawk, among the Albatrosses.

In the Pliocene Period Albatrosses inhabited the North Atlantic Ocean; but at the present time they are practically limited to the North Pacific, as far south as 20° N., the coast of Peru, and the Southern Ocean between 30° S. and 60° S. Several are dark in colour when they are young and get whiter as they grow old; and this points to the probability of *D. nigripes*, of the North Pacific, which remains dark throughout life, being nearer to the prototype Albatross than any other species now living.